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EXAMINER

ANDERSON, JAMES D

ART UNIT

PAPER NUMBER

1614

NOTIFICATION DATE

DELIVERY MODE

09/18/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@lilly.com

Office Action Summary

Application No.

10/785,326

Applicant(s)

COHEN ET AL.

Examiner

JAMES D. ANDERSON

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 and 145-157 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19 and 145-156 is/are rejected.
- 7) ☒ Claim(s) 157 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 6/10/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Formal Matters

Applicants' response and amendments to the claims, filed 6/10/2009, are acknowledged and entered. Claims 19 and 145-157 are pending and under examination.

Response to Arguments

Applicants' arguments have been fully and carefully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Upon further consideration and search, the Examiner is herein applying a new ground of rejection under 35 U.S.C. 102(e). The U.S. Provisional Applications to which the instant application claims the benefit under 35 U.S.C. 119(e) do not provide support for the claimed daily dose range of raloxifene HCl of 55-65 mg as recited in claim 145.

U.S. Provisional Application No. 60/040,260, filed March 10, 1997, discloses administration of raloxifene in an amount not greater than 120 mg per day, more preferably not greater than 100 mg per day. The preferred lower level of administration is about 40 mg per day, more preferably about 50 mg per day. The most preferred range is from 50 to 80 mg per day, and "outstanding protective effects have been observed" at about 60 mg per day, for instance from 50 to 70 mg per day (page 2, lines 21-29). Nowhere do Applicants disclose the range of 55-65 mg raloxifene HCl as recited in claim 145.

Similarly, U.S. Provisional Application No. 60/029,850, filed October 30, 1996, discloses accepted and effective daily dosages will be from 0.1 to about 1000 mg/day, and more typically from about 30 to about 200 mg/day. A preferred dose range is disclosed to be between about 60 and about 120 mg/day, with 60 mg/day particularly preferred (page 10, lines 21-27). Nowhere do Applicants disclose the range of 55-65 mg raloxifene HCl as recited in claim 145.

Support for a dose range of 55-65 mg raloxifene HCl is first found in PCT/US97/19779, filed October 29, 1997. Accordingly, USP No. 6,103,740 (Issued Aug. 15, 2000; Filed Aug. 4,

1998; U.S. Provisional Application No. 60/056,203 filed Aug. 21, 1997) qualifies as prior art against claims 19 and 145-156 under 35 U.S.C. 102(e).

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statement filed 6/10/2009. The Examiner has considered the references cited therein to the extent that each is a proper citation. Please see the attached USPTO Form 1449.

Claim Rejections - 35 USC § 102 – New Ground of Rejection

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 19 and 145-152 are rejected under 35 U.S.C. 102(e) as being anticipated by **Lakshmanan** (USP No. 6,103,740; Issued Aug. 15, 2000; Filed Aug. 4, 1998; U.S. Provisional Application No. 60/056,203 filed Aug. 21, 1997).¹

The instant claims recite a method of reducing the likelihood of incurring or developing estrogen-dependent breast cancer comprising administering orally to a post-menopausal woman diagnosed as being in need of such therapy a once daily dose of a pharmaceutical composition comprising 55-65 mg of raloxifene HCl.

Lakshmanan teaches at column 6, lines 9-26 administration of 60 mg/day raloxifene HCl to post-menopausal women for two years. In claim 4 of the Lakshmanan patent, the inventor

¹ Claim 157 is not included in this rejection because Applicant's prior-filed U.S. Provisional Applications provide support for administration of 60 mg/day raloxifene HCl. Because these prior-filed applications were filed prior to the earliest effective filing date of Lakshmanan, the reference is not available as prior art against claim 157 under 35 U.S.C. 102(e).

teaches oral administration of 60 mg/day of a compound of formula I, which includes raloxifene HCl (claim 2), to a post-menopausal woman.

While Lakshmanan does not evaluate the incidence of breast cancer in the treated patients, the same patient population is being administered the same compound in the same dose as recited in the instant claims. As such, the effects of such treatment are an inherent property of the treatment method and inseparable therefrom. It follows that the post-menopausal women treated for two years with 60 mg/day raloxifene HCl in Lakshmanan had a lower incidence of breast cancer, even if this was not measured or recognized by Lakshmanan.

It is noted that *In re Best* (195 USPQ 430) and *In re Fitzgerald* (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter, which there is reason to believe inherently includes functions that are newly cited, or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to “prove that subject matter to be shown in the prior art does not possess the characteristic relied on” (205 USPQ 594, second column, first full paragraph). There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003); see also *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320, 69 USPQ2d 1584, 1590 (Fed. Cir. 2004) (“[T]he fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention”).

Claim Rejections - 35 USC § 103 – New Ground of Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 153-156 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lakshmanan** (USP No. 6,103,740; Issued Aug. 15, 2000; Filed Aug. 4, 1998; U.S. Provisional Application No. 60/056,203 filed Aug. 21, 1997) as applied to claims 19 and 145-152 above, and further in view of **Black et al.** (USP No. 5,393,763; Issued Feb. 28, 1995).

Lakshmanan teaches as applied to claims 19 and 145-152 *supra*. Claims 153-156 differ from the primary reference in that Lakshmanan does not teach administration to women diagnosed with osteoporosis.

However, Black *et al.* teach that one of the most common types of osteoporosis is found in post-menopausal women affecting an estimated 20 to 25 million women in the United States alone (col. 1, lines 34-36). Lakshmanan teaches administration of raloxifene HCl to post-menopausal women to lower platelet counts. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made that the platelet-lowering effect of raloxifene HCl administered in a daily dose of 60 mg would also be observed if the compound was administered to post-menopausal women with osteoporosis.

As such, it would have been *prima facie* obvious to one of ordinary skill in the art to administer raloxifene HCl in a daily dose of 60 mg to post-menopausal women with osteoporosis. As discussed *supra*, such a dose, administered for a period of two years, is effective to reduce platelet counts in post-menopausal women. It follows that administration of 60 mg/day raloxifene HCl to post-menopausal women with osteoporosis as suggested and motivated by the cited prior art would naturally result in a reduced incidence of estrogen-dependent breast cancer in said women. Applicant's recognition of an additional benefit of the

raloxifene therapy suggested and motivated by the cited prior art is not a patentable distinction over the prior art.

Allowable Subject Matter

Claim 157 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant's prior-filed U.S. Provisional Applications provide support for administration of 60 mg/day raloxifene HCl. Because these prior-filed applications were filed prior to the earliest effective filing date of Lakshmanan, the reference is not available as prior art against claim 157.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES D. ANDERSON whose telephone number is (571)272-9038. The examiner can normally be reached on MON-FRI 9:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James D Anderson/
Examiner, Art Unit 1614